

IN THE CLAIMS:

1. (Original) A piezoelectric ignition mechanism comprising:
  - an assembly having first and second members rotatable with respect to one another between an activated configuration and a deactivated configuration;
  - a piezoelectric element associated with the assembly; and
  - a plexor movably associated with the assembly;wherein when the assembly is in the activated configuration, the plexor is capable of being driven toward the piezoelectric element with sufficient force to impact the piezoelectric element and cause it to produce a spark.
2. (Original) The piezoelectric ignition mechanism of claim 1, wherein:
  - the assembly defines a longitudinal axis;
  - the first and second members are slidable with respect to one another along the longitudinal axis; and
  - the first and second members rotate with respect to one another about the longitudinal axis between the activated and deactivated configurations.
3. (Original) The piezoelectric ignition mechanism of claim 1, further comprising an impact spring having first and second ends, the first end associated with the plexor, wherein the impact spring is capable of being compressed in the activated configuration to drive the plexor toward the piezoelectric unit with sufficient force to cause the piezoelectric element to produce a spark.
4. (Original) The ignition mechanism of claim 3, wherein when the assembly is in the deactivated configuration, the impact spring cannot be sufficiently compressed to cause the impact spring to drive the plexor toward the piezoelectric element with sufficient force to impact the piezoelectric element and cause it to produce a spark.
5. (Original) The ignition mechanism of claim 1, wherein the plexor includes at least one lug disposed on its side, and the assembly has at least one longitudinal slot adapted and configured to receive the lug and control movement of the plexor.

6. (Original) The ignition mechanism of claim 5, wherein the assembly further defines at least one notch, and when the assembly is in the activated configuration, the at least one lug is receivable in the at least one notch.
7. (Original) The ignition mechanism of claim 6, wherein when the assembly is in the deactivated configuration, the at least one lug is prevented from entering the at least one notch.
8. (Original) The ignition mechanism of claim 6, wherein the at least one longitudinal slot and the at least one notch are defined in the first member and connected.
9. (Original) The ignition mechanism of claim 8, wherein the second member has at least one window adapted and configured such that when the assembly is in the deactivated configuration, a side portion of the window contacts the at least one lug and prevents the at least one lug from entering the at least one notch.
10. (Original) The ignition mechanism of claim 9, wherein the at least one window further defines a ramp portion, such that when the assembly is in the activated configuration and the first member is moved a predetermined distance toward the second member, the at least one ramp causes the at least one lug to move out of the at least one notch.
11. (Original) The ignition mechanism of claim 1, further comprising a cam disposed on one of the members, wherein the cam is adapted and configured to interact with at least a portion of the other member and rotate the first member with respect to the second member.
12. (Original) The ignition mechanism of claim 11, further comprising a push button located on one of the members, the push button having an abutment extending therefrom, wherein the portion of the first member is the abutment.
13. (Original) The ignition mechanism of claim 11, wherein the cam is disposed on the first member and the cam is dimensioned to interact with an arm disposed on the second member.
14. (Original) The ignition mechanism of claim 1, used in a lighter.

15. (Original) The ignition mechanism of claim 1, used in a utility lighter having an extended wand.

16. (Original) A lighter comprising:

a lighter body having a fuel reservoir and an actuator for selectively releasing fuel; and

a piezoelectric ignition mechanism for igniting the released fuel comprising:

an assembly having first and second members rotatable with respect to one another between an activated configuration and a deactivated configuration;

a piezoelectric element positioned on the assembly;

a plexor movably disposed in the assembly; and

a biasing element associated with the plexor;

wherein when the assembly is in the activated configuration, the plexor is capable of being driven by the biasing element toward the piezoelectric element with sufficient force to produce a spark.

17. (Original) The lighter of claim 16, wherein at least one of the first and second members is rotatable inside the lighter body.

18. (Original) The lighter of claim 16, further comprising a cam disposed on one of the members, wherein the cam is adapted and configured to interact with at least a portion of the other member to rotate the first member with respect to the second member.

19. (Original) The ignition mechanism of claim 18, further comprising a push button located on the first member and having an abutment extending therefrom, wherein the cam is disposed on the second member and interacts with the abutment.

20. (Original) The ignition mechanism of claim 16, further comprising:  
an arm disposed on one of the members for rotating the member; and  
an aperture in the lighter body, wherein at least a portion of the arm extends through the aperture.

21. (Original) The lighter of claim 16 having a handle, a wand extending from the handle and a nozzle in the wand for releasing fuel.

22. (Original) A utility lighter comprising:

a housing having a handle, a fuel supply, a wand extending away from the handle, a nozzle, and an actuator for selectively releasing fuel to the nozzle; and

a piezoelectric ignition mechanism for igniting the released fuel which comprises:

an assembly having first and second members rotatable with respect to one another between an activated configuration and a deactivated configuration;

a piezoelectric element positioned on the assembly; and

a plexor movably disposed in the assembly;

wherein when the assembly is in the activated configuration the plexor is capable of being driven toward the piezoelectric element with sufficient force to impact the piezoelectric element and cause it to produce a spark and ignite the released fuel.

23. (Original) The utility lighter of claim 22, wherein one of the first and second members is rotatable inside the housing.

24. (Original) The lighter of claim 22, further comprising an aperture in the housing and an arm disposed on the second member and adapted and configured to rotate the second member, wherein at least a portion of the arm extends through the aperture.

25. (Original) The lighter of claim 24, wherein the aperture is adapted and configured to bias the arm such that the assembly is returned to the deactivated configuration after the first and second members return to the rest position after activating the piezoelectric ignition mechanism.

26. (Original) The lighter of claim 25, wherein the aperture is substantially U-shaped with a slanted ramp for biasing the arm to a deactivated configuration.

27. (Original) The lighter of claim 22, further comprising an impact spring associated with the plexor.

28. (Currently Amended) A piezoelectric ignition mechanism comprising:  
an assembly movable between an activated configuration and a deactivated configuration;  
a piezoelectric element associated with the assembly; and  
a plexor associated with the assembly, the plexor including at least one lug for engaging the assembly when the assembly is in the activated configuration, so that the plexor may be moved by the assembly to compress a biasing element; ~~and rotatable between an activated configuration and a deactivated configuration; and~~  
~~a biasing element associated with the plexor;~~  
wherein when the ~~plexor assembly~~ is in the deactivated configuration, ~~it is capable of being driven by the biasing element with sufficient force to impact the piezoelectric element and cause it to produce a spark~~ the at least one lug is blocked from engaging the assembly.

29. (New) The piezoelectric ignition mechanism of claim 28, wherein the assembly includes first and second members.

30. (New) The piezoelectric ignition mechanism of claim 29, wherein the first and second members rotate with respect to one another between the activated and deactivated configurations.

31. (New) The piezoelectric ignition mechanism of claim 29, wherein when the assembly is in the activated configuration, the at least one lug engages a notch on one of the first and second members, and when the assembly is in the deactivated configuration, the at least one lug is blocked from engaging the notch by the other of the first and second members.

32. (New) The piezoelectric ignition mechanism of claim 29, wherein the assembly defines a longitudinal axis, and compressing the first and second members with respect to one another along the longitudinal axis causes the plexor to compress the biasing element.

33. (New) The piezoelectric ignition mechanism of claim 32, wherein when the first and body members are compressed towards one another a predetermined distance, the at least one lug is disengaged from the assembly causing the biasing element to drive the plexor towards the piezoelectric element to create a spark.